

CONTROL BLOCK: 

						(1)
--	--	--	--	--	--	-----

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99																																																																																																				
0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52		53		54		55		56		57		58		59		60		61		62		63		64		65		66		67		68		69		70		71		72		73		74		75		76		77		78		79		80		81		82		83		84		85		86		87		88		89		90		91		92		93		94		95		96		97		98		99	
7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52		53		54		55		56		57		58		59		60		61		62		63		64		65		66		67		68		69		70		71		72		73		74		75		76		77		78		79		80		81		82		83		84		85		86		87		88		89		90		91		92		93		94		95		96		97		98		99															
7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52		53		54		55		56		57		58		59		60		61		62		63		64		65		66		67		68		69		70		71		72		73		74		75		76		77		78		79		80		81		82		83		84		85		86		87		88		89		90		91		92		93		94		95		96		97		98		99															

CON'T

0	1	REPORT SOURCE																										
7	8	L	6	U	5	0	0	U	2	6	7	7	U	5	1	2	8	3	8	U	5	2	6	8	3	9		
		60	61	DOCKET NUMBER										68	69	EVENT DATE					74	75	REPORT DATE					80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On May 12 and May 16, 1983, an inspection was performed to verify the operability and  
0 3 reliability of the check valves associated with the raw cooling water supply lines to  
0 4 emergency diesel generator sets 1A and 1B. The inspection, performed pursuant to the  
0 5 Nuclear Regulatory Commission IE Bulletin No. 83-03, identified that six of eight of  
0 6 the check valves were frozen in mid-position. The results of the inspection are  
0 7 reportable per Fort St. Vrain Technical Specification AC 7.5.2(a)9. No affect on  
public health or safety. No accompanying occurrence. No similar reports.

09		SYSTEM CODE X X (11)		CAUSE CODE X (12)	CAUSE SUBCODE Z (13)	COMPONENT CODE V A L V E X (14)		COMP. SUBCODE C (15)	VALVE SUBCODE A (16)
LER RO REPORT NUMBER (17)		EVENT YEAR 8 3 (21) (22)		SEQUENTIAL REPORT NO. 0 1 7 (24) (25) (26)		OCCURRENCE CODE 0 1 (28) (29)		REPORT TYPE T (30)	REVISION NO. U (32)
ACTION TAKEN A (18)	FUTURE ACTION A (19)	EFFECT ON PLANT L (20)	SHUTDOWN METHOD Z (21)		HOURS 0 0 0 0 (22) (23) (24) (25)		ATTACHMENT SUBMITTED Y (26)	NPRD-4 FORM SUB N (24)	PRIME COMP. SUPPLIER N (25)
W O 3 U (26)									

#### CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

1 0 The apparent cause is attributed to corrosion and rusting of the check valve internal  
1 1 parts. The check valves were disassembled and cleaned, internal components were re-  
1 2 placed, and disc seats were lapped, as required. The valves will be routinely inspec-  
1 3 ted as part of an annual preventive maintenance program. No further corrective action  
is anticipated or required.

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

FACILITY STATUS: 1 5 G 28

% POWER: 0 0 0 29

OTHER STATUS: N/A 30

METHOD OF DISCOVERY: D 31

DISCOVERY DESCRIPTION: 32 Inspection Pursuant to IE Bulletin No. 4-83-03

ACTIVITY CONTENT  
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35)  
1 6 2 4 33 34 N/A  
7 8 9 10 11 44  
N/A LOCATION OF RELEASE (36)  
45

PERSONNEL EXPOSURES									
NUMBER		TYPE		DESCRIPTION					
1	7	0	0	U	37	Z	38	N/A	39
7	8	9	11	12	13				

PERSONNEL INJURIES										
NUMBER				DESCRIPTION						
1	8	0	0	40	N/A					

LOSS OF OR DAMAGE TO FACILITY (43)  
TYPE DESCRIPTION  
1 9 Z (42) N/A  
2 8 3 10  
8306060134 830526  
PDR ADOCK 05000267  
S PDR

	PUBLICITY									NRC USE ONLY
ISSUED	(N)	(44)	DESCRIPTION	(45)						
7	8	9	10							
2	0		N/A							

NRC USE ONLY

8306060134 830526  
PDR ADCK 05000267  
S PDR

FACSIMILE

May 12, 1983

MR. JOHN T. COLLINS, REGIONAL ADMINISTRATOR  
REGION IV  
NUCLEAR REGULATORY COMMISSION  
611 RYAN PLAZA DRIVE  
SUITE 1000  
ARLINGTON, TX 76011

ON THURSDAY, MAY 12, 1983, AT 0900 HOURS, WHILE THE PLANT WAS SHUT DOWN AND AN INSPECTION OF RAW WATER CHECK VALVES SUPPLYING COOLING WATER TO THE EMERGENCY DIESEL GENERATOR SETS (PURSUANT TO I & E BULLETIN 83-03) WAS IN PROGRESS, IT WAS DETERMINED THAT FOUR OF FOUR CHECK VALVES ASSOCIATED WITH THE 1B DIESEL GENERATOR SET WERE FROZEN IN THE MID-POSITION APPARENTLY DUE TO CORROSION. CORRECTIVE ACTION IS IN PROGRESS. IT IS ASSUMED THAT SIMILAR CONDITIONS EXIST CONCERNING THE FOUR CHECK VALVES ASSOCIATED WITH THE 1A DIESEL GENERATOR SET. ALL VALVES WILL BE INSPECTED/REPAIRED PRIOR TO REACTOR OPERATION AT POWER. A DETAILED REPORT WILL FOLLOW.

THIS EVENT IS REPORTABLE PER FORT ST. VRAIN TECHNICAL SPECIFICATION AC 7.5.2(A)9 AS REPORTABLE OCCURRENCE NO. 50-267/83-017/01-T-0.

PLEASE CONFIRM RECEIPT OF THIS TRANSMITTAL BY CALL BACK TO FRANK NOVACHEK AT (303) 785-2224, EXTENSION 270.

FRANK NOVACHEK  
PUBLIC SERVICE COMPANY OF COLORADO  
FORT ST. VRAIN NUCLEAR GENERATING STATION  
16805 WELD COUNTY ROAD 19 1/2  
PLATTEVILLE, COLORADO 80651

REPORT DATE: May 26, 1983

REPORTABLE OCCURRENCE 83-017

ISSUE 0

OCCURRENCE DATE: May 12, 1983

Page 1 of 4

FORT ST. VRAIN NUCLEAR GENERATING STATION  
PUBLIC SERVICE COMPANY OF COLORADO  
16805 WELD COUNTY ROAD 19 1/2  
PLATTEVILLE, COLORADO 80651-9298

REPORT NO. 50-267/83-017/01-T-0

Final

IDENTIFICATION OF  
OCCURRENCE:

On May 12, 1983, and May 16, 1983, an inspection to verify the operability and reliability of the check valves in the raw cooling water supply lines to emergency diesel generator set 1B (K-9202) and emergency diesel generator set 1A (K-9201) was performed. The inspection, performed pursuant to the Nuclear Regulatory Commission I & E Bulletin No. 83-03, identified that six of eight check valves were frozen in mid-position. This event is reportable per Fort St. Vrain Technical Specification AC 7.5.2(a)9.

CONDITIONS PRIOR  
TO OCCURRENCE:

Cold shutdown

DESCRIPTION OF  
OCCURRENCE:

On May 12, 1983, with the reactor in a shutdown condition, an inspection of the check valves in the raw cooling water supply lines to the emergency diesel generator set 1B (K-9202) identified that four of four discs in the cooling water check valves were "frozen" in the mid-position, apparently due to internal rust and corrosion.

Operability of the emergency diesel generator set 1A was verified prior to removal from service of the 1B emergency diesel generator set for the required inspection.

On May 16, 1983, with the reactor in a shutdown condition, an inspection of the check valves in the raw cooling water supply lines to the emergency diesel generator set 1A (K-9201) identified that two of four discs in the cooling water check valves were "frozen" in a partially open position, apparently due to internal rust and corrosion. The swing check discs in the remaining two valves had free movement on the hanger pin.

Operability of the emergency diesel generator set 1B was verified prior to removal from service of the 1A emergency diesel generator set for the required inspection.

APPARENT CAUSE  
OF OCCURRENCE:

Unusual service conditions, including environment.

The apparent cause is attributed to a combination of corrosive wear and a buildup of rust in the check valve internal parts. There was no evidence of separation between the valve disc and the hinge arm in the eight check valves inspected.

The table below identifies applicable information from the NPRD-2 report of engineering data on the valves inspected.

<u>D/G SET</u>	<u>VALVE NUMBER</u>	<u>CONDITION AS FOUND</u>	<u>NPRD-2 ENGINEERING DATA</u>
1B	V-42813	Frozen Mid-Position	Walworth, one way flow check, cast iron fabricated, 4.0 inch, Model No. 63221.
1B	V-42814	Frozen Mid-Position	Walworth, one way flow check, cast iron fabricated, 4.0 inch, Model No. 63221.
1B	V-45811	Frozen Mid-Position	Walworth, one way flow check, cast iron, cast, 3.0 inch, Model No. C322.
1B	V-45812	Frozen Mid-Position	Walworth, one way flow check, cast iron, cast, 3.0 inch, Model No. C322.
1A	V-42815	Frozen 3/4" Off Seat	Walworth, one way flow check, cast iron fabricated, 4.0 inch, Model No. 63221.
1A	V-42816	Free Disk Movement	Walworth, one way flow check, cast iron fabricated, 4.0 inch, Model No. 63221.
1A	V-45814	Frozen 1/4" Off Seat	Walworth, one way flow check, cast iron, cast, 3.0 inch, Model No. C322.
1A	V-45813	Free Disk Movement	Walworth, one way flow check, cast iron, cast, 3.0 inch, Model No. C322.

ANALYSIS OF  
OCCURRENCE:

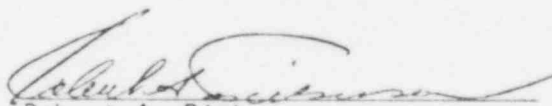
An accumulation of rust and corrosion around the hanger and hanger pin inhibited free movement of the hanger and disc assembly in the check valves found defective during the inspection of 1A and 1B emergency diesel generator sets.

CORRECTIVE  
ACTION:

All eight check valves on the raw cooling water supply to both diesel generator sets were disassembled, and the rust and corrosion were removed from the valve internals. The disc seats were lapped as required. Repair parts were installed where necessary. All repairs were completed while the reactor was in a shutdown condition.

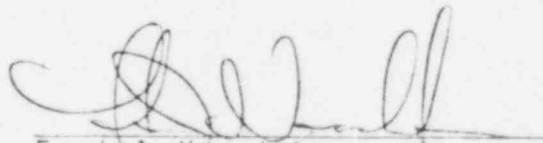
In compliance with the Nuclear Regulatory Commission I & E Bulletin No. 83-03, an inspection of the raw water supply check valves associated with the emergency diesel generator heat exchangers is being incorporated into an annual preventive maintenance program.

Prepared By:



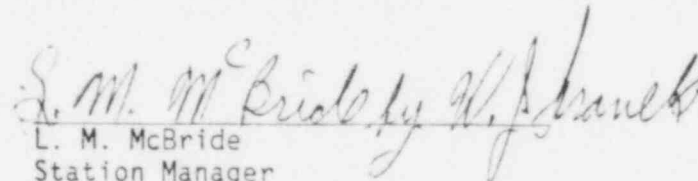
Robert A. Dickerson  
Senior Technical Services Technician

Reviewed By:



Frank J. Novachek  
Technical Services Engineering Supervisor

Reviewed By:



L. M. McBride  
Station Manager

Approved By:



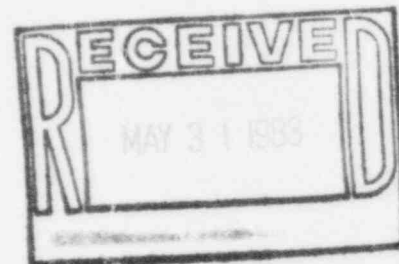
Don Warembourg  
Manager, Nuclear Production



# Public Service Company of Colorado

16805 Road 19 1/2, Platteville, Colorado 80651-9298

May 26, 1983  
Fort St. Vrain  
Unit No. 1  
P-83190



Mr. John T. Collins, Regional Administrator  
Region IV  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive  
Suite 1000  
Arlington, Texas 76011

Reference: Facility Operating License  
No. DPR-34

Docket No. 50-267

Dear Mr. Collins:

Enclosed please find a copy of Reportable Occurrence Report No. 50-267/83-017, Final, submitted per the requirements of Technical Specification AC 7.5.2(a)9.

Also, please find enclosed one copy of the Licensee Event Report for Reportable Occurrence Report No. 50-267/83-017.

Very truly yours,

*Don Warembourg by W.F.L.*  
Don Warembourg  
Manager, Nuclear Production

DW/clh

Enclosure

cc: Director, MIPC

11005